

Date: Sun, 3 Jul 94 04:30:10 PDT  
From: Ham-Policy Mailing List and Newsgroup <ham-policy@ucsd.edu>  
Errors-To: Ham-Policy-Errors@UCSD.Edu  
Reply-To: Ham-Policy@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Policy Digest V94 #294  
To: Ham-Policy

Ham-Policy Digest                      Sun, 3 Jul 94                      Volume 94 : Issue 294

Today's Topics:

(none)

Existing regulations limit our advancement.  
What are the frequencies for Wireless Communications?

Send Replies or notes for publication to: <Ham-Policy@UCSD.Edu>  
Send subscription requests to: <Ham-Policy-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Policy Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-policy".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: 2 Jul 94 14:42:10 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: (none)  
To: ham-policy@ucsd.edu

At some point recently, Doug Faunt inquired:

>I've been considering trying to learn to use a paddle left-handed, so  
>that I can keep a pencil in my right. Any opinions on this?  
>I haven't learned to use a paddle yet. I'm still working on copying  
>

To which I offer:

While I CAN copy CW at 60 wpm and scribble it down on paper, I sure  
wouldn't recommend that you get into that trap of using a pencil  
early on. What I WOULD suggest, however, is that you use your  
already-existing computer and your favorite editor to copy with.

There's a couple of reasons for this. Three, actually, although the

third may be peculiar to a very limited group of radio amateurs...

First, it's easier. The process of brain-activity to getting-it-on-paper is FAR more difficult than the process of brain-activity to nailing-a-key on your keyboard.

Secondly, (and more importantly, I suspect) is the matter of feeling empowered to correct mistakes with an editor or wordprocessor. That, all by itself can dramatically RAISE your actual rate of copy, mostly because you're tempted to stab that keyboard key much more promptly (knowing that you can easily fix a boo-boo) than you would slowly hauling that pencil in several directions on the paper before finally finishing up that single character...

And thirdly, there's the matter of putting your efforts to use as a service to the public. Which, by the way, is one of the reasons we're allowed to hog such a huge amount of frequency spectrum in the first place. If you know how to copy a message by way of your word processor, you'll more easily be able to relay that message. It will be more accurate, people won't be forced to read your hen-scratch, (which will get WORSE, not better, as both your age and code speed increase!) and you'll even be able to use digital outlets for your messages which would be, um, well, VERY difficult if it were on paper...

I should have brought this point up at the very beginning, but I understand that you may well have asked the question primarily because of a desire to sit for an upgrade exam, where a pencil is probably the order of the day, and where a computer may not be possible. But I truly believe that using the computer will enhance your code speed SO remarkably that sitting for a paltry 13 or 20 wpm exam with a pencil in hand will turn out to be duck soup.

And finally, I'm reminded that I have a penchant for showing disabled or handicapped folks how to use inexpensive circuit boards to "copy down" received CW. And by that, I mean that the COVOX boards for example, and no doubt some of the Sound Blaster (and other) cards can easily be trained to recognize (via a microphone) speech and sound input. It's quite simple at this point for a person with no keyboard-ability whatsoever to speak the letters "alpha" "Bravo" "Charlie" for example, into the microphone at a rather high rate of speed (hey, we're only talking CW here, not data link speeds!) and have those letters magically appear on the screen and in a file. Did the sending operator make a mistake, and have to correct a letter? No problem, the disabled operator simply speaks the word "backspace" and cranks in the correct letter verbally. I know of a couple of folks with no use of their hands whatsoever who are copying code in that fashion at speeds exceeding 20 wpm.



However, my question is what are the frequencies or bands that can be used by this sort of telemetry. It is hope that (once developed) this system of scoring will be wide spread in its use, non-amateur bands and/or bands not requiring any sort of licensing (i.e. 902-928 Mhz - wireless stereo speaker) be use. I know that the 902-928 Mhz allows the use of wireless remote control or wireless stereo speakers, however, what other frequency spectra allow the same type transmissions?

Should this question be somewhat vauge, please EMAIL me at : bmicales@facstaff.wisc.edu , you can also respond to this post to the same address.

Thanks for your help

73 de

Bruce Micales WA2DEU

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Date: Sat, 2 Jul 1994 21:36:49 GMT  
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!  
europa.eng.gtefsd.com!emory!rsiatl!ke4zv!gary@network.ucsd.edu  
To: ham-policy@ucsd.edu

References <Cry9xo.JJ6@world.std.com>, <062994152201Rnf0.78@amcomp.com>,  
<366@ted.win.net>  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: CW - THE ONLY MODE!

In article <366@ted.win.net> mjsilva@ted.win.net (Michael Silva) writes:  
>In article <062994152201Rnf0.78@amcomp.com>, Dan Pickersgill (dan@amcomp.com)  
writes:  
>>>: drt@world.std.com (David R Tucker) writes:  
>  
>>>"Wetware modem" as a term generates much more heat  
>>>than light.  
>>  
>>It is descriptive of the activity. And I did not coin the phrase, I just  
>>used it.  
>>  
>I notice nobody ever speaks about "wetware keyswitch actuators", or  
>"wetware OCR."  
>  
>73 (he typed, emulating a solenoid matrix?)  
>  
>Mike, KK6GM

Actually, you just did. :-) And if you took typing class in school, that's exactly what they were conditioning you to be, a mechanism that translates letters to automatic finger movements. You were taught OCR the same way, by drill and repetition in order to condition the decoding pathways in the I/O space of the brain.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Sat, 2 Jul 1994 21:46:07 GMT

From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!gatech!swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu

To: ham-policy@ucsd.edu

References <Cs8ELC.G80@news.Hawaii.Edu>, <070194115917Rnf0.78@amcomp.com>, <CsAE9M.M2r@news.Hawaii.Edu>

Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)

Subject : Re: CW ... My view.

In article <CsAE9M.M2r@news.Hawaii.Edu> jeffrey@kahuna.tmc.edu (Jeffrey Herman) writes:

>

>Well, \*my\* soldering iron is hot for at least an hour per day [and that's  
>NOT due to the climate: it only gets to about 85F here in Manoa each  
>day with nice cooling 15 knot Tradewinds; drops to 75F nights]. It  
>doesn't matter what a ham is building, just as long as (s)he is  
>building \*something\*. I choose to be cheap about it and will only work  
>with discrete parts that I salvage from old radios and TV sets.

Well I suppose Og felt the same way while chipping his Nth stone axe. What you are saying is equivalent to saying "I don't care what a punk is writing as long as he's writing", even though what he's writing is obscenities spray painted on your house wall. That doesn't wash, or wash off. It matters very much what an amateur is building. Amateur radio is not supposed to be The Society for Creative Anachronism.

Gary

--

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Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary

Lawrenceville, GA 30244

Date: Sat, 2 Jul 1994 21:29:15 GMT

From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!  
europa.eng.gtefsd.com!emory!rsiatl!ke4zv!gary@network.ucsd.edu

To: ham-policy@ucsd.edu

References <1994Jun27.044125.121874@zeus.aix.calpoly.edu>,  
<772994479snx@skyld.grendel.com>, <Cs8ELC.G80@news.Hawaii.Edu>or  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: CW ... My view.

In article <Cs8ELC.G80@news.Hawaii.Edu> jeffrey@kahuna.tmc.edu (Jeffrey Herman)  
writes:

>

>You've just reinforced the 'old cost agrument'; keys can be easily made  
>while no one I know has ever made a mic.

Perhaps that has to do with your narrow circle of acquaintance. Certainly  
I made my first microphone before I made my first telegraph key (I already  
knew how to talk, I didn't yet know Morse encoding of alphabet). It's  
very simple. My first mic was two razor blades stuck in a cigar box with  
a mechanical pencil "lead" resting across the blades. This is a crude, but  
surprisingly sensitive, carbon microphone. I've since made dozens of my  
own microphones, from dynamic mics, made from small speakers, to velocity  
ribbon mics made from chewing gum foil and refrigerator magnets. That  
latter has a response almost as good as an old RCA D44. Of course today  
microphones are such a ubiquitous part of our culture that it hardly seems  
necessary to manufacture them at home. They're all around us.

Gary

--

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Lawrenceville, GA 30244				

Date: Sat, 2 Jul 1994 21:17:27 GMT

From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!  
europa.eng.gtefsd.com!emory!rsiatl!ke4zv!gary@network.ucsd.edu

To: ham-policy@ucsd.edu

References <1994Jun21.192916.6620@auc.trw.com>, <SR0.94Jun30075922@media-  
lab.media.mit.edu>, <wyn.42.2E131262@ornl.gov>emor

Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: CW ... My view.

In article <wyn.42.2E131262@ornl.gov> wyn@ornl.gov (C. C. Wynn) writes:  
>In article <SR0.94Jun30075922@media-lab.media.mit.edu> sro@media.mit.edu (Shawn  
O'Donnell) writes:

>  
>> That means he's including at least a couple of parts of  
>>the brain of the operator, which--in some cases--may be considered to  
>>be more complex than one of those FM receiver ICs.  
>  
>I assume you are referring to those parts of, or all of those "wetware  
>modem" parts. Which brings up the question, where does the modem end and  
>"human thought" begin? Whether one is demodulating air particles beating  
>against the eardrum or photons beating against the retina, it seems that  
>all could be construed as part of the modem process. By the same analogy  
>it seems that whether one is stiking a telegraph key, keys on a keyboard,  
>or modulating sound pressure waves with the larnyx and oral cavity, these  
>processes could be considered part of the modulation process. In other  
>words, where is the "wetware modem boundary" in terms of human physiology?  
>Where is the dividing line between the modem parts and all of the other parts?

Those are good questions, and ones AI and cognitive researchers have been chasing for decades. What is clear is that there *are* separate areas of the brain responsible for the "modem" functions and for the cognitive and interpretive functions. Pet scans show that, as well as the study of people who have suffered trauma to brain regions. It also seems clear that some "modem" processes are pre-wired by evolution to respond to certain modulations more readily than to others.

Human infants begin to recognize faces by 3 months with no formal training. They begin to pick up and comprehend natural language speech by 1 year without formal training. They do not begin to pick up and interpret Morse encodings of the Roman alphabet without formal training, and few if any ever become as proficient in it as they are with natural language or visual communications. There appears to be a much more direct coupling of natural language to thought processes than there is for indirect systems of artificial alphabetic encoding of the artificial spellings of natural language words.

Other pattern recognition and language assembly functions must be called into play to make any sense of the ideas encoded by the restricted and less symbolically rich artificial beeps. Part of the brain appears to be a superb parallel pattern recognizer and matcher. It appears to deal with complex symbols that have rich detail better than with very rigid geometries. There's probably a ripe area here for applying chaos and complexity theory to human pattern recognition.

It's clear that current machines work very differently than the brain.

They are easy to build to decode and interpret very rigid patterns of encodings of very restrictive sets of language, but have difficulty with richer symbol sets such as natural speech.

Bringing this back more directly to radio systems, it seems obvious that radio modulation systems should be chosen and optimized to take advantage of these characteristics. Communications from machine to machine should use rigid encodings with rigid 1:1 correspondences to intermediate symbols that can be mechanically combined into language symbols. Machines are optimal for rote chores. But direct human to human communications systems should attempt to use richer symbols that correspond more directly to thought symbols. Visual communications does that best (a picture is worth a thousand words), and secondly use of direct natural language couples more directly to the thought symbols of the mind that convey meaning than do artificial symbolic intermediaries.

Gary

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--
Gary Coffman KE4ZV          |   You make it,      | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |   we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way           |   Guaranteed!     | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244   |                   |
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Date: Sat, 2 Jul 1994 21:55:20 GMT  
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!swrinde!  
emory!rsiatl!ke4zv!gary@network.ucsd.edu  
To: ham-policy@ucsd.edu

References <2v13le\$otd@news.iastate.edu>, <2v1in0\$c6a@ccnet.ccnet.com>,  
<070194232633Rnf0.78@amcomp.com>  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: Existing regulations limit our advancement.

In article <070194232633Rnf0.78@amcomp.com> dan@amcomp.com (Dan Pickersgill) writes:

>The FCC, as I understand it, considers these to be ancillary functions of  
>the repeater (like the patch) and can be restricted. The repeater is under  
>automatic control when a patch is made. Remember the person bringing up  
>the patch may not be and probably is NOT a control operator of the  
>repeater. They are accessing an ancillary function.

97.109(e) No station may be automatically controlled while transmitting third-party communications, except a station retransmitting digital packet radio communications on the 6 m and shorter wavelength bands.

It may be widely violated, but 97.109(e) is still on the books. Any



time a patch is in use, a real live control operator with the ability to control transmission by some means other than by on the input channel signals must be present at a control point.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
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Lawrenceville, GA 30244				

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Date: Sun, 03 Jul 1994 02:43:00 EST

From: sdd.hp.com!caen!malgudi.oar.net!wariat.org!dreamland!jga@decwrl.dec.com

To: ham-policy@ucsd.edu

References <2v1in0\$c6a@ccnet.ccnet.com>, <070194232633Rnf0.78@amcomp.com>, <1994Jul2.215520.9763@ke4zv.atl.ga.us>-

Subject : Re: Existing regulations limit our advancement.

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>97.109(e) No station may be automatically controlled while transmitting  
>third-party communications, except a station retransmitting digital  
>packet radio communications on the 6 m and shorter wavelength bands.  
>

>It may be widely violated, but 97.109(e) is still on the books. Any  
>time a patch is in use, a real live control operator with the ability  
>to control transmission by some means other than by on the input channel  
>signals must be present at a control point.

What if the station you call on the patch is a licensed ham or vice versa.  
i.e. Each party at either end of the patch is a ham.

-j

--

Jon Anhold N8USK - PGP Key available on request - (jga@dreaml.wariat.org)  
Dreamland Network Systems Cleveland, Ohio

"Where you come from is gone.. Where you thought you were going to was never there, and where you are ain't no good unless you can get away from it."

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End of Ham-Policy Digest V94 #294

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